

TABLE 1. *Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, January 1939.*

Station	Average pressure	Departure	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Julianeabaab, Greenland.....	29.60	+0.17	30.14	5	29.24	29
Reykjavik, Iceland.....	29.80	+0.34	30.42	25	28.38	20
Lerwick, Shetland Islands.....	29.56	-.14	30.39	30	28.50	16
Valencia, Ireland.....	29.58	-.32	30.27	23	28.56	16
Lisbon, Portugal.....	30.07	-.08	30.45	23	29.09	28
Madeira.....	30.11	+0.01	30.42	22	29.65	27
Horta, Azores.....	29.96	-.20	30.42	3	29.30	31
Belle Isle, Newfoundland.....	29.61	-.13	30.44	6	28.64	12
Halifax, Nova Scotia.....	29.86	-.12	30.58	6	29.00	23
Nantucket.....	29.96	-.08	30.53	8	29.24	22
Hatteras.....	30.08	-.06	30.53	28	29.45	18
Bermuda.....	30.10	-.06	30.48	29	29.72	19
Turks Island.....	30.08	+0.03	30.14	1	29.97	18
Key West.....	30.09	-.01	30.30	21	29.89	14
New Orleans.....	30.12	-.01	30.56	25	29.52	20

<sup>1</sup> For 23 days.

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

An intense storm centered near the southern edge of the Labrador peninsula on the 2d and 3d and advanced over the ocean on the following days, first toward the east-northeast, then slightly to the south of east. On the morning of the 5th the center was near 50° N., 40° W., and near here the American steamship *Warrior* noted force 12. For a day or two longer the storm remained intense, moving rather slowly, then it turned toward the northeast with greater speed but decreased strength.

Another important low entered the ocean likewise well to northward, the time being over a week later; this storm was central to northeastward of Newfoundland on the 12th, and became part of an extensive low system, reaching a long distance from west to east. By the 14th the eastern portion of this system had become very intense near 50° N., 20° W., and from this vicinity it moved slowly northeastward, remaining very violent, until the 17th, when it showed a lessening of force, and soon separated into two parts. The northeastern part moved away to the waters east of Iceland, while the southwestern part, remaining near the British Isles, largely filled up during the next few days.

Two vigorous storms affected the western part of the North Atlantic about this time, notably in lower latitudes than those previously described. The earlier of these was near Hatteras on the 16th, and traveled toward the east-northeast. By the evening of the 17th, near 40° N., 48° W., it had become stronger than before and within the next two days it had advanced to 55° N., 23° W., continuing very intense. The course then changed to northward and the low was near Iceland by the evening of the 20th. The second of these lower-latitude storms was central near the entrance of Chesapeake Bay on the 18th, and had reached the southeast portion of the Grand Banks by the later hours of the 19th. The 21st found this second storm near Ireland, as the southern part of a large low system.

This stormy period from about the 14th to 22d resulted in several ship disasters, chiefly to eastward of the 35th meridian. The Norwegian motor tanker *Jaguar*, from Minatitlan for Germany, broke in two suddenly on the 18th, near 35° N., 46° W., but apparently all the crew were rescued. The after part floated for about a fortnight, to 35° N., 32° W., where it was picked up and towed to Fayal. From large seagoing vessels remote from land three men were lost overboard, the Norwegian motor tanker *Glitter* losing the first officer. Close to shore many lives were lost from smaller craft sinking or from upsetting of small boats attempting rescue.

Numerous vessels which made port safely with crews intact suffered minor structural damage, or loss or smashing of their small boats. The table of gales shows several cases during these days of vessels encountering force 12 or force 11. Charts XIII, XIV, and XV present the conditions respectively on the 17th, 18th, and 19th.

The morning of the 22d showed a strong low central north of Lake Ontario, in connection with which a secondary developed to the southward. This low system resulted in gales which were experienced by vessels on the western part of the ocean during the next few days, as it advanced northeastward. One report of force 12, from the American tanker *H. D. Collier*, is connected with this low.

A succeeding storm of marked strength was centered on the forenoon of the 25th near the Bay of Fundy (see chart XVI.) This took a course at first northeastward then later northward. The Dutch steamship *Simaloer* reported hurricane-force wind resulting from it when the vessel was between Bermuda and Nantucket.

*Fog*.—An extensive search in records for the North Atlantic has brought to notice no earlier month with as little fog as the reports at hand show for January 1939. From regions to eastward of the 45th meridian not a single mention has come, though the area between the British Isles and the Azores had experienced considerable fog during the latter part of the month preceding.

Over waters between Nova Scotia and Hatteras a little fog was encountered in January, largely during the final three days. The 5°-square, 35° to 40° N., 70° to 75° W., furnishes reports of fog on 6 days, or more days than for December 1938. This square leads in the month's fog occurrence on the North Atlantic Ocean proper. Only on the 12th and the 16th was fog met in the Grand Banks area.

For the Gulf of Mexico only one of the 5°-squares has yielded reports of fog; that square was the northwestern district, 25° to 30° N., 90° to 95° W., which is the foggiest portion of the Gulf. There the data show 9 days of fog, almost all of them during the first fortnight of the month.

#### ADDITIONAL NOTE ON THE WEST INDIAN HURRICANE OF AUGUST 23-28, 1938

Mr. R. A. Dyke, forecaster at the Weather Bureau office, New Orleans, La., has recently received and has submitted some interesting material from the Mexican Meteorological Service, Tacubaya, D. F., regarding the West Indian hurricane of August 23-28, 1938, that passed over Yucatan on the 25-26th and died out near central Mexico. The following extract is from a letter received by Mr. Dyke:

The track of the storm, we believe, passed exactly over Progreso, since there was observed a calm of about 15 minutes and the wind backed from north to south by way of west.

In Ciudad Victoria the cyclonic winds began at hour 2000 on the 27th, but it was not until the 28th, between 1100 and 2000, that the wind reached its maximum, causing great damage. The precipitation was extraordinarily abundant in the north sector of the storm and rather scant in the south, and although this is normal the difference was very remarkable in this cyclone.

In Zacatecas the wind backed on the 30th, with a falling barometer. The great mass of clouds crossed the country and reached the Pacific coast.

Figure 1 is from a photostat of a self-registering wind pressure gage at Progreso, Yucatan, showing the intensity and gustiness of the northerly winds before, and the southerly winds after, the passage of the calm center on August 26. Note the light winds to calm at the center.—*W. E. Hurd.*

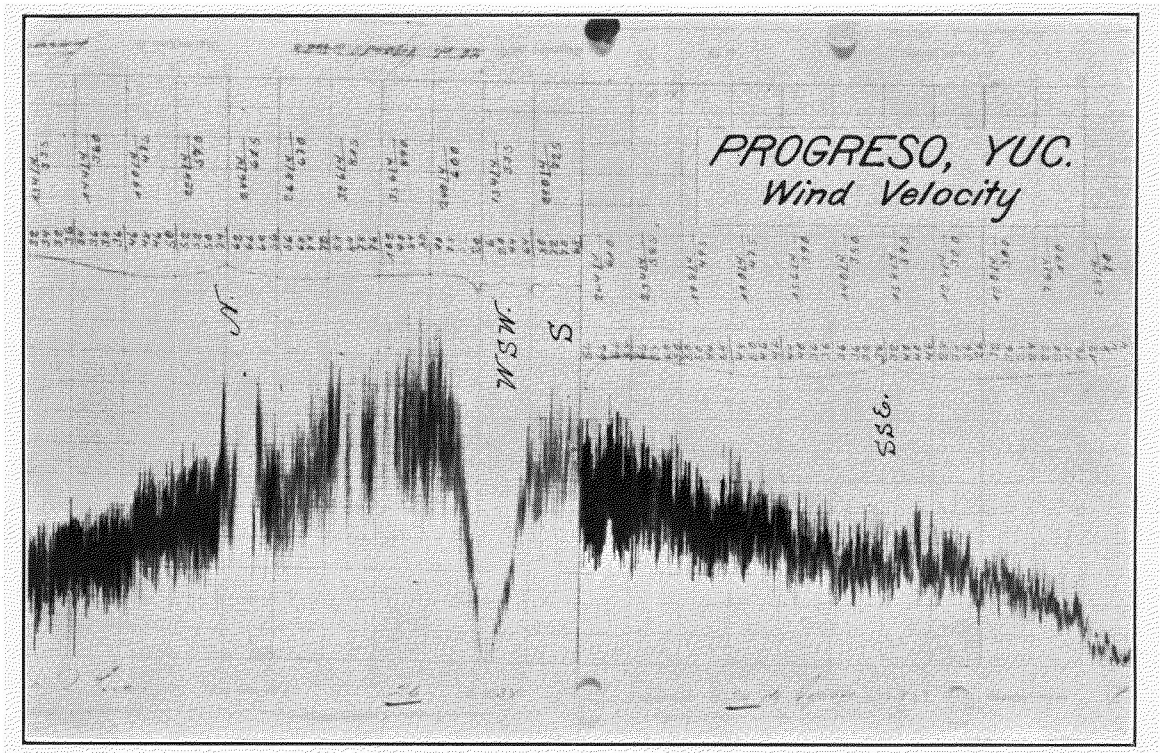


FIGURE 1.